

## Milestone 7 - STL Initial Use On Air

### A. Assumptions

1. STL put in use for NTSC operations as test
2. If combined with HDTV signal, helps HDTV transition

## Task 8 - Encoder Available

### A. Assumptions

1. Technical info to start encoder design available at time of NPRM
2. Full technical documentation available at Final Report & Order
3. No commitment to special ICs until Final Report & Order
4. Encoders available in sufficient quantity to meet demand

## Task 9 - Exciter Available

### A. Assumptions

1. Technical info to start exciter design available at time of NPRM
2. Full technical documentation available at Final Report & Order
3. No commitment to special ICs until Final Report & Order
4. Exciters available in sufficient quantity to meet demand

## Task 10 - Transmitter Modification

### A. Assumptions

1. Transmitters currently installed can be modified without difficulty
2. Existing support facilities are adequate

## Task 11 - Overall System Performance Analysis

### A. Assumptions

1. Overall system passes proof-of-performance on first try
2. Dummy load & antenna tests

## Milestone 12 - Initial Test Signals On Air

### A. Assumptions

1. Station goes on air with test signals until Program Test Auth. received
2. Test signals used for field test of new system

## Task 13 - FCC Program Test Authority

### A. Assumptions

1. FCC grants immediate, automatic Program Test Authorization by FAX

#### Task 14 - FCC License Grant

##### A. Assumptions

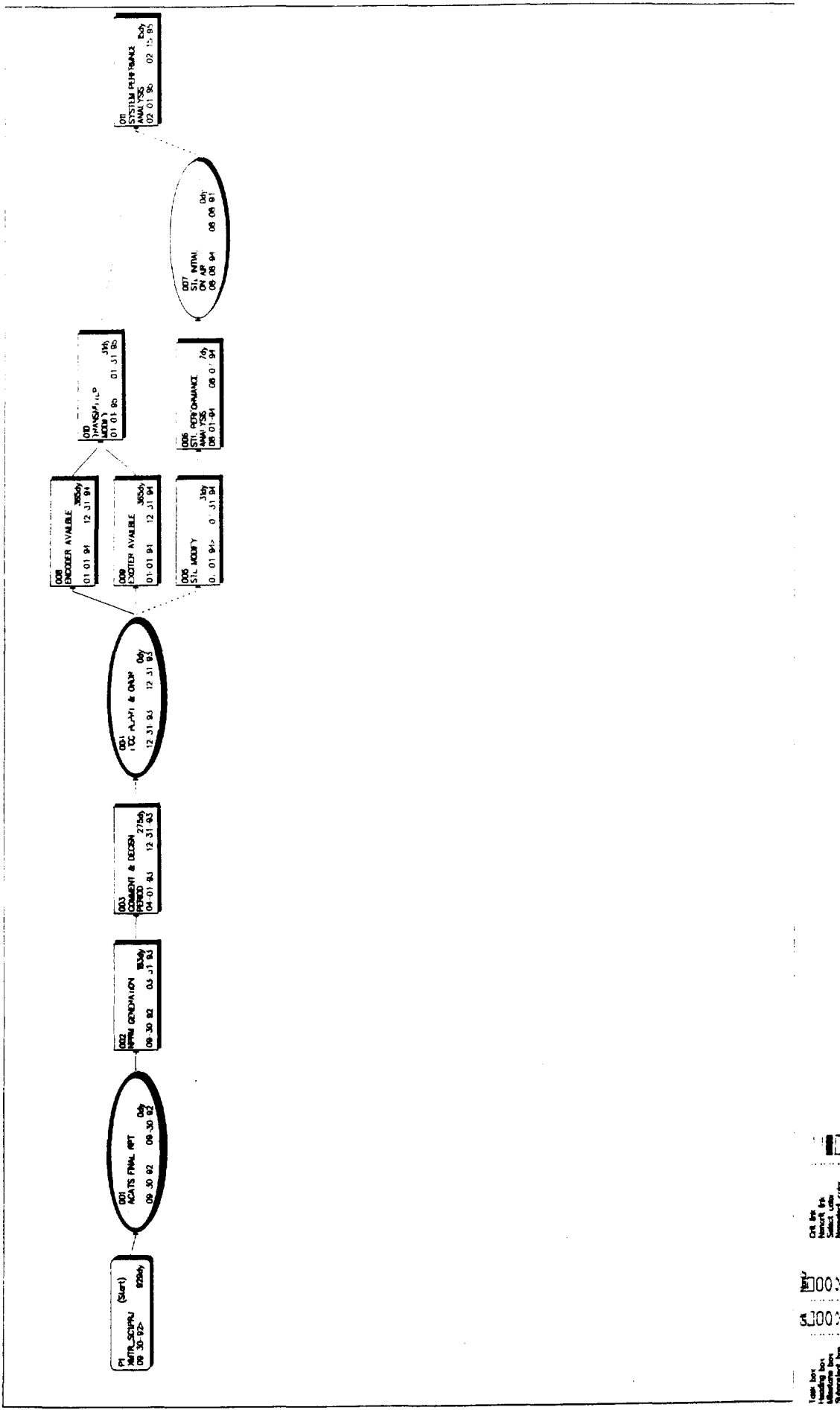
1. FCC grants final license with moderately short turnaround

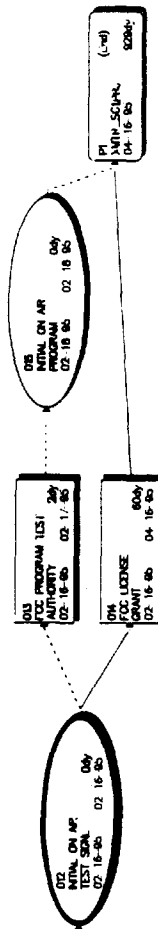
#### Milestone 15 - Initial Programming On Air

##### A. Assumptions

1. Program Test permits airing programming until license received

TRANSMITTER SINGLE-CHANNEL COMPATIBLE - SCENARIO 1

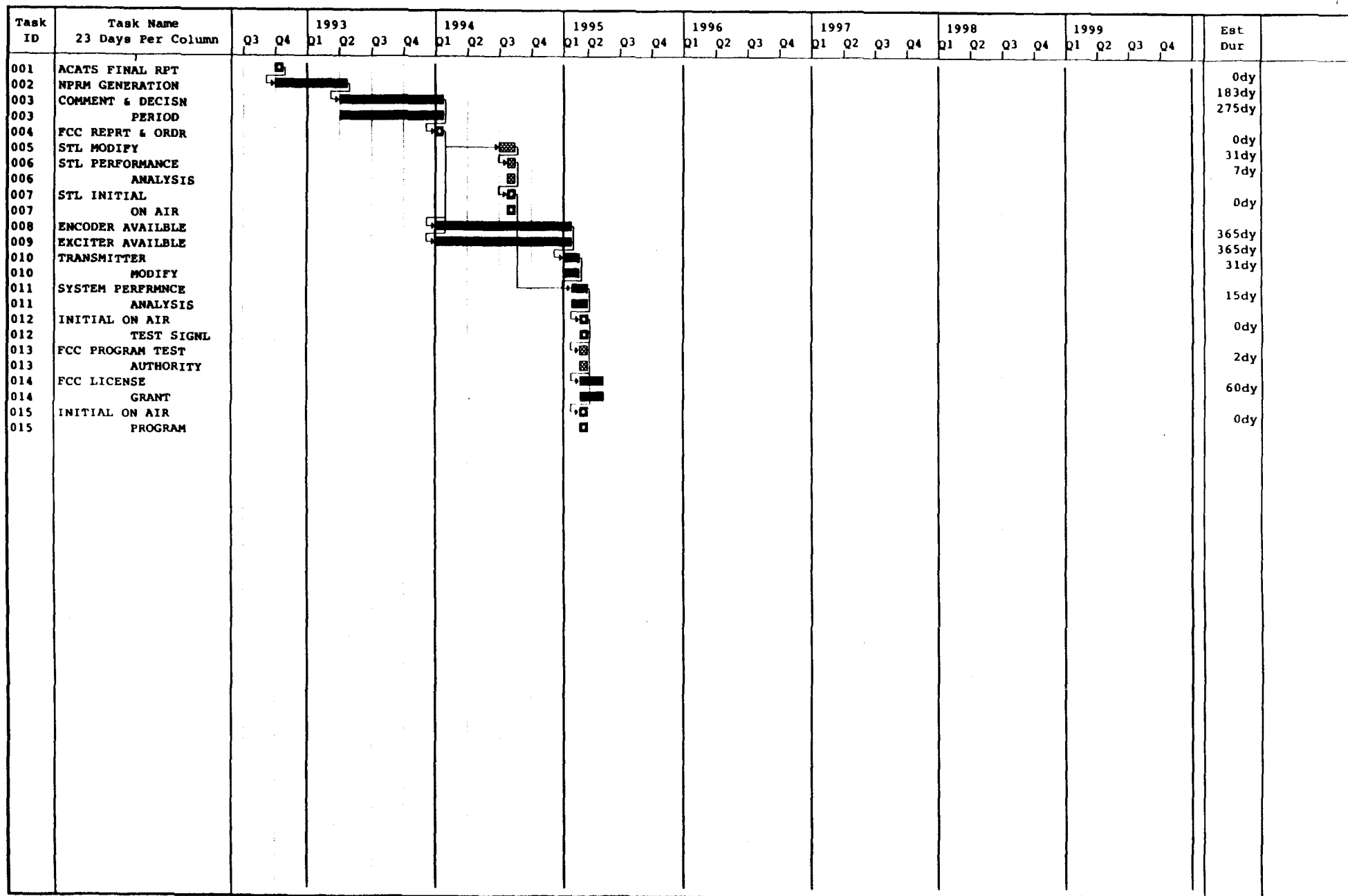




Task Outline  
01-01-92 3:22a

Project: XMTR SCI PRJ  
Revision: 7

TRANSMITTER: SINGLE-CHANNEL, COMPATIBLE - SCENARIO 1



— Unassigned      — Interrupted      ■ Noncritical      ■ Critical      ■ Milestone

## IS/WP-2 PERT Chart

### Supporting List of Assumptions

Transmitter: Simulcast w/Existing Tower - Scenario 2 - Alternative A

#### General Assumptions

1. Station Assignment process occurs following FCC Final Report & Order
2. The average station will experience litigation delays of a year
3. Governmental approval times are typical of those experienced previously
4. Station is not involved in multi-station tower facility
5. Station has existing tower with space & wind loading for additional antenna
6. Some strengthening of tower is required to accommodate additional load
7. Transmitter building does not have room for additional transmitter
8. Local approvals are required for transmitter building expansion
9. Local approvals are required for addition of antenna to tower
10. Spectrum is ultimately found for station-owned STL
11. Space exists for additional STL antennas at both ends of link

## Specific Assumptions

### Milestone 1 - Advisory Committee Final Report

#### A. Assumptions

1. Advisory Committee completes final report on current schedule
2. Advisory Committee report recommends system choice
3. No litigation that impedes process

### Task 2 - NPRM Generation & Channel Allotment

#### A. Assumptions

1. FCC issues NPRM on announced schedule
2. Channels are allotted to cities at release of NPRM
3. FCC accepts Advisory Committee recommendation on system choice
4. No litigation that impedes process

### Task 3 - Comment & Decision Period

#### A. Assumptions

1. Allows time for comments & reply comments
2. Provides time for preparation of Final Report & Order
3. No litigation that impedes process

### Milestone 4 - FCC Report & Order

#### A. Assumptions

1. Final Report & Order confirms choice of single system

### Task 5 - Station Assignment Process

#### A. Assumptions

1. Station channel assignment conducted after Final Report & Order
2. Stations cannot begin designs until after channel assignment
3. No litigation that impedes process

### Task 6 - Litigation

#### A. Assumptions

1. Stations will experience some delay from litigation
2. All litigation, wherever in process, aggregated at this point
3. Litigation is not extended, is resolved on expedited basis
4. Litigation affects certainty of channel assignment for stations

## **Task 7 - Antenna/Tower Design**

### **A. Assumptions**

1. Station will not begin final design until channel is certain
2. Preliminary work done well in advance
3. Tower reinforcement, antenna mounting, & transmission line included
4. Side-mounting of antennas for selected system is possible
5. Design is for single station on its own tower
6. Modelling of antenna interactions is not necessary

## **Task 8 - FCC Construction Permit Issuance**

### **A. Assumptions**

1. CP grant dependent only on technical design
2. CP grant not dependent on local approvals
3. CP grant in semi-realistic time after application

## **Task 9 - Tower Alteration**

### **A. Assumptions**

1. Tower reinforcement required to support additional antenna/xmsn line
2. Required relocation of other antennas is minimal
3. Antenna can be mounted without major tower rebuild

## **Task 10 - Antenna Fabrication & Delivery**

### **A. Assumptions**

1. Antenna fab will not begin before CP grant
2. Contingent order placed well in advance to hold place for delivery
3. Antenna manufacturing capacity sufficient to meet demand

## **Task 11 - Antenna & Transmission Line Installation**

### **A. Assumptions**

1. Weather not a factor in installation completion within slack time

## **Task 12 - Local Zoning Permits**

### **A. Assumptions**

1. Zoning Permit required for extension of transmitter building
2. Zoning Permit granted in typical time

### **Task 13 - Local Planning Approval**

#### **A. Assumptions**

1. Plan approvals required for transmitter building extension
2. Plan approvals required for tower reinforcement & antenna addition
3. Plan approvals granted in typical time

### **Task 14 - Building Construction or Alteration**

#### **A. Assumptions**

1. Building construction/alteration not "fast-tracked"
2. Building construction/alteration in typical time

### **Milestone 15 - Auxiliary Link Spectrum Allocation**

#### **A. Assumptions**

1. Separate STLs are required for Simulcast & NTSC channels
2. FCC allocates sufficient spectrum for Auxiliaries at time of Final R&O
3. Spectrum may be same as currently used for STLs, etc.
4. Spectrum sharing w/existing analog FM STLs is technically possible
5. Simulcast & NTSC Auxiliaries may share existing paths/channels

### **Task 16 - STL Frequency Search**

#### **A. Assumptions**

1. Frequency search ultimately successful

### **Task 17 - STL CP & License**

#### **A. Assumptions**

1. STL CP & license granted in "nominal" time

### **Task 18 - STL Antenna & Transmission Line Installation**

#### **A. Assumptions**

1. STL antenna/xmsn line installation delayed for good weather
2. Weather not a factor in installation completion within slack time
3. Adequate mounting space available without significant construction

### **Task 19 - STL Transmitter & Receiver Installation**

#### **A. Assumptions**

1. STL transmitter/receiver installation in parallel with antenna/xmsn line
2. Adequate equipment space available in existing facility

#### Task 20 - Negotiate Telco STL

##### A. Assumptions

1. Local common carrier can interconnect Studio & Transmitter
2. Circuits available with good reliability & technical characteristics
3. Negotiations in parallel w/microwave frequency search, as backup
4. Microwave frequency search or channel sharing w/NTSC successful

#### Task 21 - STL Performance Analysis

##### A. Assumptions

1. STL passes proof-of-performance test on first try
2. Path reliability is good

#### Milestone 22 - STL Initial Use On Air

##### A. Assumptions

1. STL put in use for NTSC operations as test
2. If combined STL, helps transition to new system

#### Task 23 - Encoder Available

##### A. Assumptions

1. Technical info to start encoder design available at time of NPRM
2. Full technical documentation available at Final Report & Order
3. No commitment to special ICs until Final Report & Order
4. Encoders available in sufficient quantity to meet demand

#### Task 24 - Exciter/Transmitter Available

##### A. Assumptions

1. Technical info to start exciter design available at time of NPRM
2. Full technical documentation available at Final Report & Order
3. No commitment to special ICs until Final Report & Order
4. Exciters & transmitters available in sufficient quantity to meet demand

#### Task 25 - Transmitter Installation

##### A. Assumptions

1. Transmitters available as needed without difficulty
2. Support facilities must be constructed in transmitter bldg extension

**Task 26 - Overall System Performance Analysis**

**A. Assumptions**

1. Overall Simulcast system passes proof-of-performance on first try
2. Dummy load & antenna tests

**Milestone 27 - Initial Test Signals On Air**

**A. Assumptions**

1. Station goes on air with test signals until Program Test Auth. received
2. Test signals used for field test of new system

**Task 28 - FCC Program Test Authority**

**A. Assumptions**

1. FCC grants immediate, automatic Program Test Authorization by FAX

**Task 29 - FCC License Grant**

**A. Assumptions**

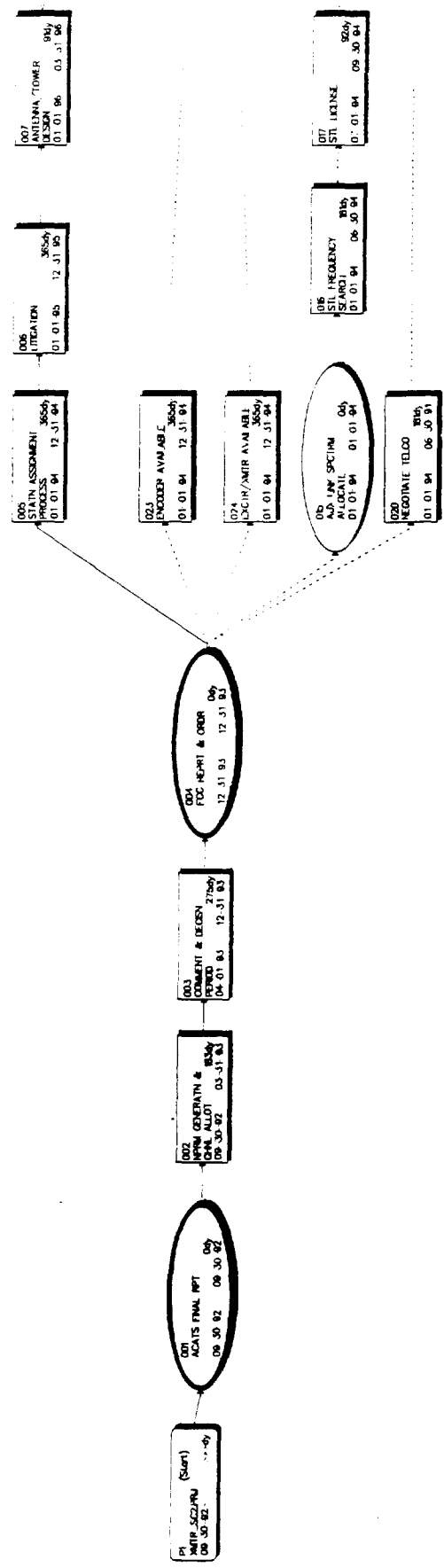
1. FCC grants final license with moderately short turnaround

**Milestone 30 - Initial Programming On Air**

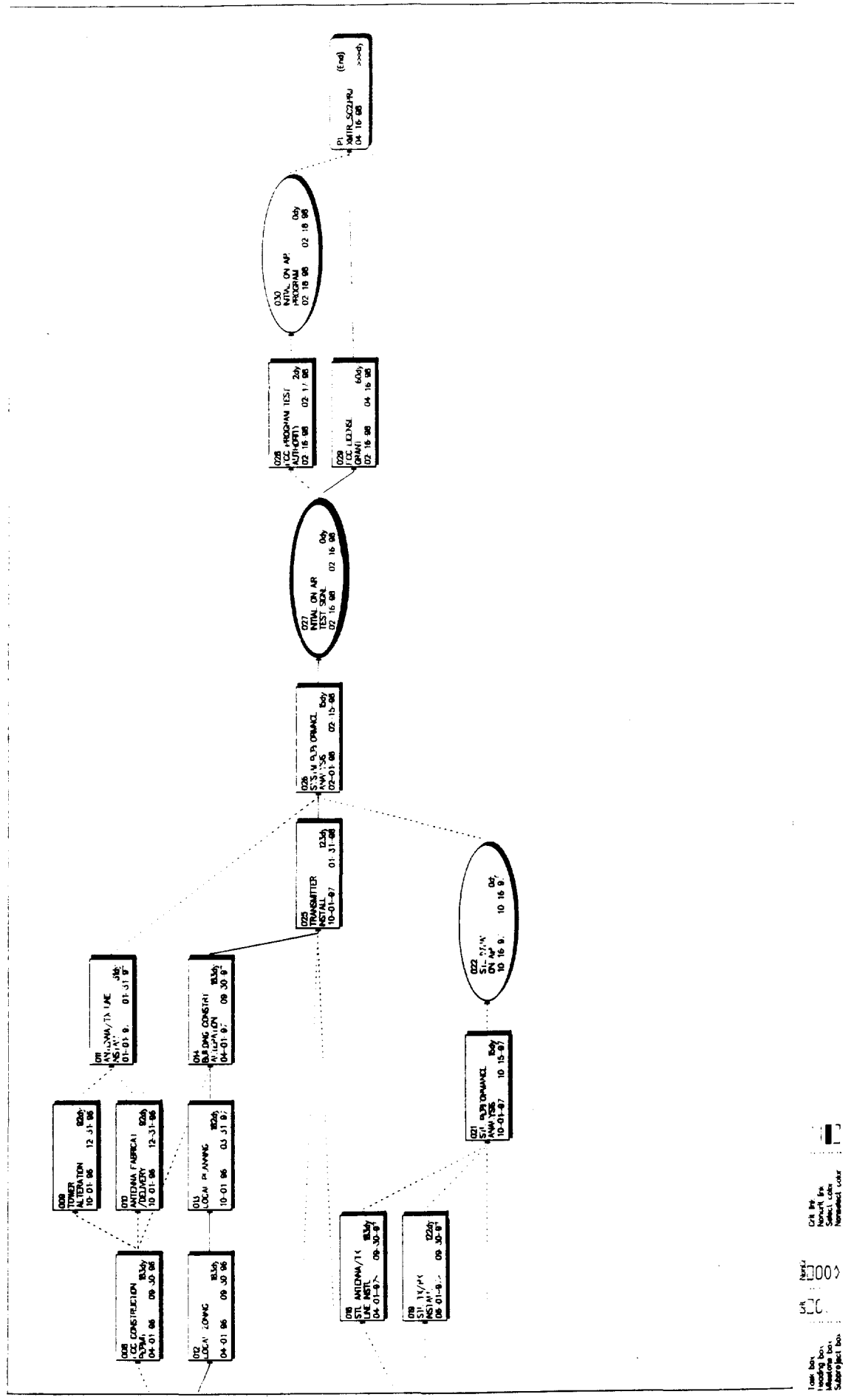
**A. Assumptions**

1. Program Test permits airing programming until license received

TRANSMITTER SALLCAST #/EXISTING TOWER - SCZJNU 2



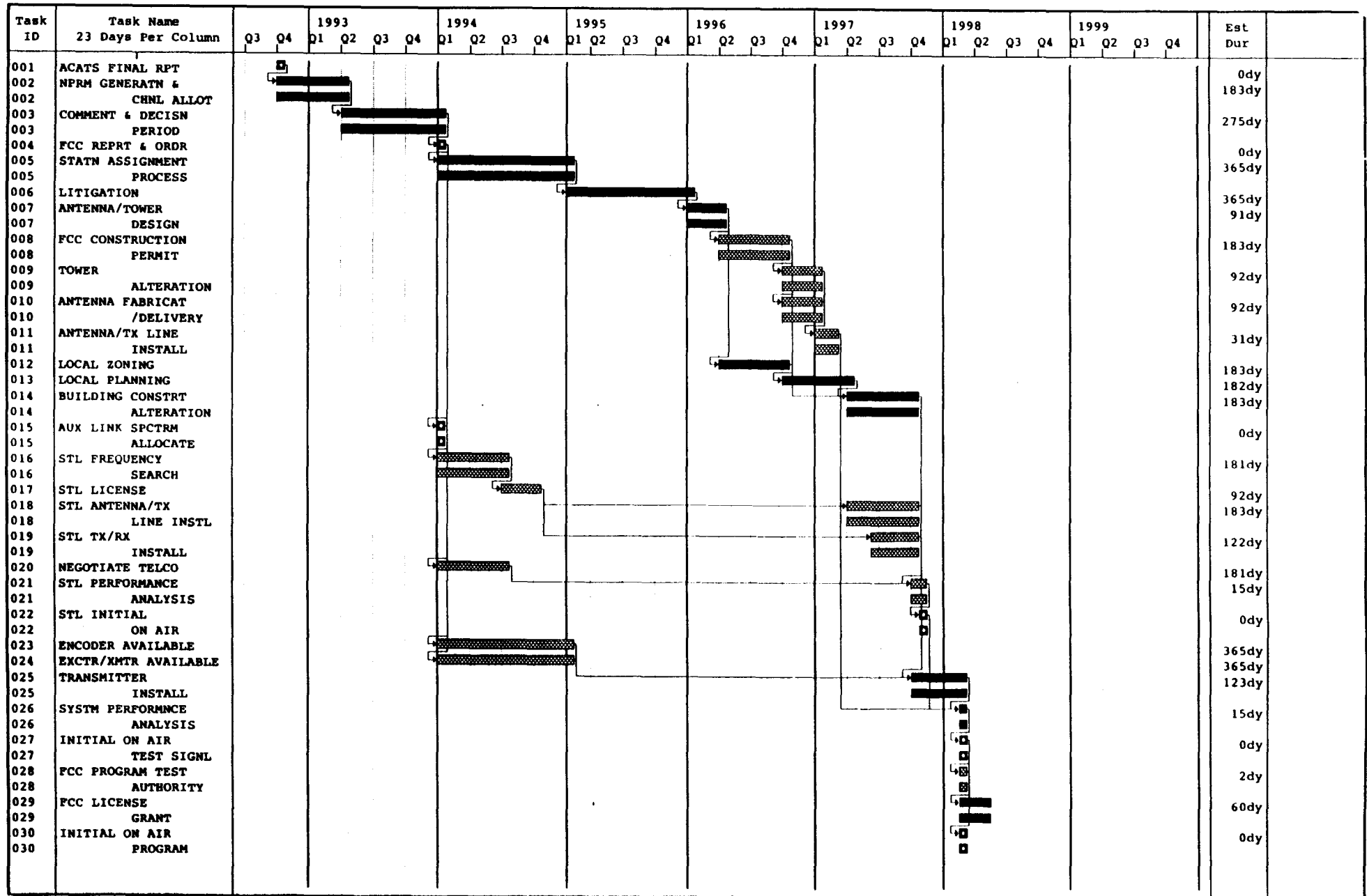
## TRANSMITTER SAILCAST W/EXISTING TOWER · SCENARIO 2



Task Outline  
01-01-92 2:53a

Project: XMTR\_SC2.PRJ  
Revision: 24

XMTR: SIMULCAST W/EXISTING TOWER - SCENARIO 2 - TYPICAL



— Unassigned    — Interrupted    ■ Noncritical    ■ Critical    ■ Milestone

## IS/WP-2 PERT Chart

### Supporting List of Assumptions

Transmitter: Simulcast w/Existing Tower - Scenario 2 - Alternative B

#### General Assumptions

1. Station Assignment process occurs concurrent with FCC Final Report & Order
2. Station will experience no litigation delays
3. Governmental approval times are "nominal," i.e. very short
4. Station is not involved in multi-station tower facility
5. Station has existing tower with space & wind loading for additional antenna
6. Some strengthening of tower is required to accommodate additional load
7. Transmitter building does not have room for additional transmitter
8. Local approvals are required for transmitter building expansion
9. Local approvals are required for addition of antenna to tower
10. Spectrum is ultimately found for station-owned STL
11. Space exists for additional STL antennas at both ends of link

## Specific Assumptions

### Milestone 1 - Advisory Committee Final Report

#### A. Assumptions

1. Advisory Committee completes final report on current schedule
2. Advisory Committee report recommends system choice
3. No litigation that impedes process

### Task 2 - NPRM Generation & Channel Allotment

#### A. Assumptions

1. FCC issues NPRM on announced schedule
2. Channels are allotted to cities at release of NPRM
3. FCC accepts Advisory Committee recommendation on system choice
4. No litigation that impedes process

### Task 3 - Comment & Decision Period

#### A. Assumptions

1. Allows time for comments & reply comments
2. Provides time for preparation of Final Report & Order
3. No litigation that impedes process

### Milestone 4 - FCC Report & Order

#### A. Assumptions

1. Final Report & Order confirms choice of single system

### Task 5 - Station Assignment Process

#### A. Assumptions

1. Station channel assignment made concurrently w/Final Report & Order
2. Stations cannot begin designs until after channel assignment
3. No litigation that impedes process

### Task 6 - Litigation

#### A. Assumptions

1. No delay from litigation once Final Report & Order issued
2. No uncertainty of channel assignment for stations

## **Task 7 - Antenna/Tower Design**

### **A. Assumptions**

1. Station will not begin final design until channel is certain
2. Preliminary work done well in advance
3. Tower reinforcement, antenna mounting, & transmission line included
4. Side-mounting of antennas for selected system is possible
5. Design is for single station on its own tower
6. Modelling of antenna interactions is not necessary

## **Task 8 - FCC Construction Permit Issuance**

### **A. Assumptions**

1. CP grant dependent only on technical design
2. CP grant not dependent on local approvals
3. CP grant in "nominal" time after application

## **Task 9 - Tower Alteration**

### **A. Assumptions**

1. Tower reinforcement required to support additional antenna/xmsn line
2. Required relocation of other antennas is minimal
3. Antenna can be mounted without major tower rebuild

## **Task 10 - Antenna Fabrication & Delivery**

### **A. Assumptions**

1. Antenna fab will not begin before CP grant
2. Contingent order placed well in advance to hold place for delivery
3. Antenna manufacturing capacity sufficient to meet demand

## **Task 11 - Antenna & Transmission Line Installation**

### **A. Assumptions**

1. Weather not a factor despite small slack time available

## **Task 12 - Local Zoning Permits**

### **A. Assumptions**

1. Zoning Permit required for extension of transmitter building
2. Zoning Permit granted in "nominal" time

### Task 13 - Local Planning Approval

#### A. Assumptions

1. Plan approvals required for transmitter building extension
2. Plan approvals required for tower reinforcement & antenna addition
3. Plan approvals granted in "nominal" time

### Task 14 - Building Construction or Alteration

#### A. Assumptions

1. Building construction/alteration is "fast-tracked"
2. Building construction/alteration on overtime basis

### Milestone 15 - Auxiliary Link Spectrum Allocation

#### A. Assumptions

1. Separate STLs are required for Simulcast & NTSC channels
2. FCC allocates sufficient spectrum for Auxiliaries at time of Final R&O
3. Spectrum may be same as currently used for STLs, etc.
4. Spectrum sharing w/existing analog FM STLs is technically possible
5. Simulcast & NTSC Auxiliaries may share existing paths/channels

### Task 16 - STL Frequency Search

#### A. Assumptions

1. Frequency search ultimately successful

### Task 17 - STL CP & License

#### A. Assumptions

1. STL CP & license granted in "nominal" time

### Task 18 - STL Antenna & Transmission Line Installation

#### A. Assumptions

1. STL antenna/xmsn line install cannot be delayed for good weather
2. Weather not a factor in installation completion within slack time
3. Adequate mounting space available without significant construction

### Task 19 - STL Transmitter & Receiver Installation

#### A. Assumptions

1. STL transmitter/receiver installation in parallel with antenna/xmsn line
2. Adequate equipment space available in existing facilities

#### Task 20 - Negotiate Telco STL

##### A. Assumptions

1. Local common carrier can interconnect Studio & Transmitter
2. Circuits available with good reliability & technical characteristics
3. Negotiations in parallel w/microwave frequency search, as backup
4. Microwave frequency search or channel sharing w/NTSC successful

#### Task 21 - STL Performance Analysis

##### A. Assumptions

1. STL passes proof-of-performance test on first try
2. Path reliability is good

#### Milestone 22 - STL Initial Use On Air

##### A. Assumptions

1. STL put in use for NTSC operations as test
2. If combined STL, helps transition to new system

#### Task 23 - Encoder Available

##### A. Assumptions

1. Technical info to start encoder design available at time of NPRM
2. Full technical documentation available at Final Report & Order
3. No commitment to special ICs until Final Report & Order
4. Encoders available in sufficient quantity to meet demand

#### Task 24 - Exciter/Transmitter Available

##### A. Assumptions

1. Technical info to start exciter design available at time of NPRM
2. Full technical documentation available at Final Report & Order
3. No commitment to special ICs until Final Report & Order
4. Exciters & transmitters available in sufficient quantity to meet demand

#### Task 25 - Transmitter Installation

##### A. Assumptions

1. Transmitters available as needed without difficulty
2. Support facilities must be constructed in transmitter bldg extension

**Task 26 - Overall System Performance Analysis**

**A. Assumptions**

1. Overall Simulcast system passes proof-of-performance on first try
2. Dummy load & antenna tests

**Milestone 27 - Initial Test Signals On Air**

**A. Assumptions**

1. Station goes on air with test signals until Program Test Auth. received
2. Test signals used for field test of new system

**Task 28 - FCC Program Test Authority**

**A. Assumptions**

1. FCC grants immediate, automatic Program Test Authorization by FAX

**Task 29 - FCC License Grant**

**A. Assumptions**

1. FCC grants final license with moderately short turnaround

**Milestone 30 - Initial Programming On Air**

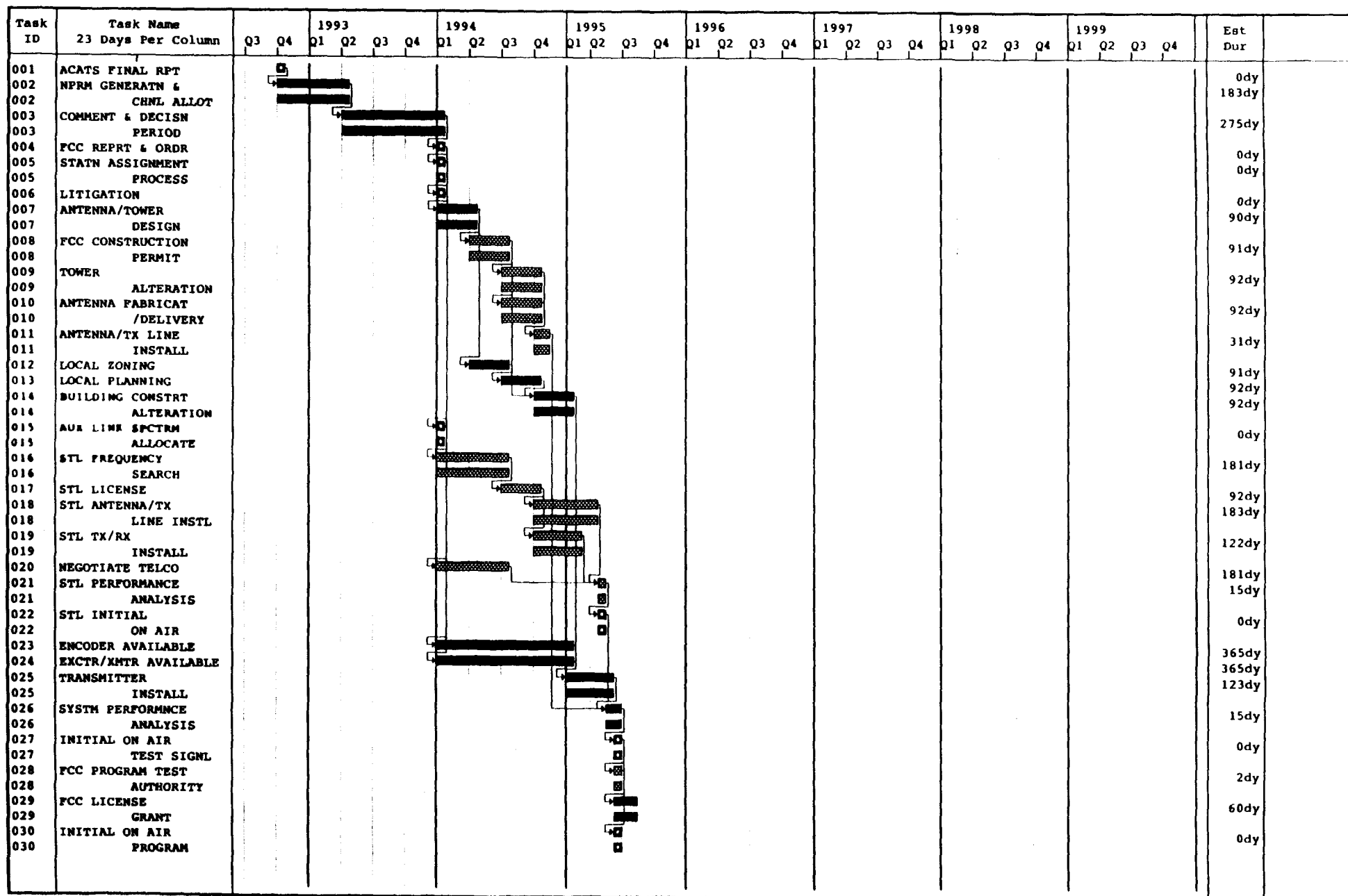
**A. Assumptions**

1. Program Test permits airing programming until license received

Task Outline  
01-01-92 3:04a

Project: XMTRMSC2.PRJ  
Revision: 25

XMTR: SIMULCAST W/EXISTING TOWER - SCENARIO 2 - MINIMUM



— Unassigned      — Interrupted      ■ Noncritical      ■ Critical      ■ Milestone

## IS/WP-2 PERT Chart

### Supporting List of Assumptions

Transmitter: Simulcast w/New Tower Required - Scenario 3 - Alternative A

#### General Assumptions

1. Station Assignment process occurs following FCC Final Report & Order
2. The average station will experience litigation delays of a year
3. Governmental approval times are typical of those experienced previously
4. Station is not involved in multi-station tower facility
5. Station's existing tower has inadequate capacity for additional antenna
6. Existing tower site has insufficient room for additional tower
7. New tower & transmitter building required at new site
8. Local approvals are required for new transmitter building
9. Local approvals are required for new tower
10. Spectrum is ultimately found for station-owned STL
11. Space exists for additional STL antennas at both ends of link

## Specific Assumptions

### Milestone 1 - Advisory Committee Final Report

#### A. Assumptions

1. Advisory Committee completes final report on current schedule
2. Advisory Committee report recommends system choice
3. No litigation that impedes process

### Task 2 - NPRM Generation & Channel Allotment

#### A. Assumptions

1. FCC issues NPRM on announced schedule
2. Channels are allotted to cities at release of NPRM
3. FCC accepts Advisory Committee recommendation on system choice
4. No litigation that impedes process

### Task 3 - Comment & Decision Period

#### A. Assumptions

1. Allows time for comments & reply comments
2. Provides time for preparation of Final Report & Order
3. No litigation that impedes process

### Milestone 4 - FCC Report & Order

#### A. Assumptions

1. Final Report & Order confirms choice of single system

### Task 5 - Station Assignment Process

#### A. Assumptions

1. Station channel assignment conducted after Final Report & Order
2. Stations cannot begin designs until after channel assignment
3. No litigation that impedes process

### Task 6 - Litigation

#### A. Assumptions

1. Stations will experience some delay from litigation
2. All litigation, wherever in process, aggregated at this point
3. Litigation is not extended, is resolved on expedited basis
4. Litigation affects certainty of channel assignment for stations

## **Task 7 - Transmitter Site Acquisition**

### **A. Assumptions**

1. Station determines non-usability of existing tower well in advance
2. Station begins search for land in advance of FCC decision
3. Station waits for end of litigation before completing acquisition
4. Little suitable space available in major metropolitan areas
5. Sufficient space can ultimately be found on the market

## **Task 8 - Antenna/Tower Design**

### **A. Assumptions**

1. Station will not begin final design until channel & location are certain
2. Station will move existing NTSC channel to new site
3. Preliminary work done well in advance
4. Tower structure, antenna mounting, & transmission line included
5. Design is for single station on its own tower
6. Modelling of antenna interactions is not necessary

## **Task 9 - FAA Obstruction Clearance Approval**

### **A. Assumptions**

1. Site obtained is away from airports
2. Site obtained is away from flight corridors
3. No FAA control over spectrum-related matters

## **Task 10 - Environmental Impact Statement**

### **A. Assumptions**

1. Preparation cannot begin until site location is confirmed
2. Cannot be completed until antenna/tower design is complete
3. Principal concerns are tower aesthetics and radiation
4. Building and site infrastructure are not environmentally significant
5. Same statement can be used for all agencies requiring one

## **Task 11 - FCC Construction Permit (CP) Issuance**

### **A. Assumptions**

1. CP grant dependent on Environmental Impact Statement
1. CP grant dependent on technical design
2. CP grant not dependent on local approvals
3. CP grant in moderate, realistic time after application

## **Task 12 - Tower Construction**

### **A. Assumptions**

1. Construction can begin as soon as all approvals are received
2. No significant delays for weather
3. Relatively tall tower (1-2,000 feet)
4. Tower large enough for more than just HDTV antenna
5. Tower fully equipped - including elevator, etc.

## **Task 13 - Antenna Fabrication & Delivery**

### **A. Assumptions**

1. Contingent order placed well in advance to hold place for delivery
2. Antenna fab will not begin before CP grant
3. Antenna fab will begin before all local approvals received
3. Antenna manufacturing capacity sufficient to meet demand

## **Task 14 - Antenna & Transmission Line Installation**

### **A. Assumptions**

1. Weather not a factor in installation completion within slack time

## **Task 15 - Local Zoning Permits**

### **A. Assumptions**

1. Zoning Permit required for both tower & building construction
2. Environmental Impact Statement sufficient to satisfy authorities
3. No litigation from local interests to preclude granting of permit
4. Zoning Permit granted in typical time

## **Task 16 - Local Planning Approval**

### **A. Assumptions**

1. Zoning approval required before Planning Approval
2. Plan approvals required for transmitter building
3. Plan approvals required for tower & antennas
4. Plan approvals granted in typical time

## **Task 17 - Building Construction**

### **A. Assumptions**

1. No existing transmitter building at new tower site
2. Building construction not "fast-tracked"
3. Building construction in typical time